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Anti-submarine warfare is a diversified competency. Its conduct requires coordination across air, surface, and sub-surface domains. In a "1000 Ship Navy" it requires regional partners as well. Much work is ongoing in technology and tactics. However, the employment of operational art is lacking. Regional Combatant Commands need a persistent ASW function with theater-wide knowledge and responsibility to correct this deficiency. The Chief of Naval Operations' call for a New Maritime Strategy presents a real opportunity to effect this change. This paper examines the role a Theater ASW Commander (TASWC) can play to fill the seam between tactics and theater/national strategies. It discusses a past example and a recent experiment that demonstrate the concept. Several recommendations for employment of a TASWC are made.

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# NAVAL WAR COLLEGE Newport, R.I.

# WHAT ROLE CAN A THEATER ANTI-SUBMARINE WARFARE COMMANDER SERVE IN THE NEW MARITIME STRATEGY?

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature:

23 October 2006

#### **Abstract**

Anti-submarine warfare is a diversified competency. Its conduct requires coordination across air, surface, and sub-surface domains. In a "1000 Ship Navy" it requires regional partners as well. Much work is ongoing in technology and tactics. However, the employment of operational art is lacking. Regional Combatant Commands need a persistent ASW function with theater-wide knowledge and responsibility to correct this deficiency. The Chief of Naval Operations' call for a New Maritime Strategy presents a real opportunity to effect this change. This paper examines the role a Theater ASW Commander (TASWC) can play to fill the seam between tactics and theater/national strategies. It discusses a past example and a recent experiment that demonstrate the concept. Several recommendations for employment of a TASWC are made.

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#### Introduction

There is a clear call for open sea lanes and forward force projection as part of our National Security Strategy and the policy documents that flow from it. "We fight our enemies abroad, instead of waiting for them to arrive... We seek to shape the world, not merely be shaped by it." Submarine warfare presents a serious threat to that strategy. There are many historical examples where that threat, whether real or perceived, either denied access to sea lines of communication or caused significant force losses for their use. In fact this lesson has been learned, forgotten, and relearned time and again.

The U.S. Navy played a pivotal role in the defeat of the German U-boats in World War I, but paid scant attention to the task of protection and defense of maritime trade in the interwar years. Although the U.S. Navy took part in an undeclared war against the U-boats in 1940-1941, it was unprepared for the task when the Germans unleashed their U-boats against U.S. shipping off the East Coast in January 1942. The coastal convoy system was not introduced until six months after the United States entered the War. It took several more months to establish a convoying system along the Gulf Coast ... The U.S. Navy's failure was due more to the lack of organization and inadequacy of doctrine than to a shortage of escorts.<sup>2</sup>

The Falklands campaign illustrates just how effective the submarine is as a force multiplier. At the onset of the war, the Argentine surface fleet was a major concern to the Royal Navy. The British SSN *Conqueror* put an end to that threat by sinking the cruiser *General Belgrano* after only six days at sea.<sup>3</sup> The loss of one of its two capital ships compelled the Argentine surface fleet to return to port and become a fleet "in being" for the remainder of the war. During the battle to retake South Georgia, an Argentine submarine threat forced the ship carrying the Royal Marine invasion force to move 200 miles off the

<sup>1.</sup> U.S. President, The National Security Strategy of the United States of America, (Washington, DC: White House, March 2006).

<sup>2.</sup> Milan Vego, Operational Warfare, (Newport, RI: Naval War College, 2000), 8.

<sup>3.</sup> Max Hastings and Simon Jenkins, *The Battle for the Falklands*, (New York, NY: W-W-Norton & Company, 1983), 149.

Royal Marines were unable to return in time to support the invasion.<sup>5</sup> The threat posed by the sole remaining Argentine submarine *San Luis* caused the British to expend "more than 150 depth charges and torpedoes against false contacts." That single threat was unsuccessfully engaged by "two ASW aircraft carriers and more than a dozen frigates and destroyers plus associated ASW aircraft." These actions diverted too many assets to operational protection and similarly interfered with offensive engagements.

Anti-submarine warfare (ASW) is a Navy core competency as designated by the Commission on Roles and Missions of the Armed Forces in 1995. It is an asset-intensive team effort. This was evident in both World War II and the Cold War. By many accounts, the competency was again left to atrophy with the end of the Cold War and the fall of the Soviet Union. In fact, for most of the post-Cold War era, "there has been no consensus on ASW war-fighting or investment strategies, the various communities (submarines, surface combatants, aircraft, and undersea surveillance) have largely set their own priorities and fended for themselves." In this era of shrinking acquisition budgets, rising system costs (e.g., USD \$2.5B<sup>10</sup> submarines, etc.), and competing strategic priorities (i.e., the war on terror) this "go it alone" approach is clearly unaffordable. The solution therefore rests on

<sup>4.</sup> Ibid., 128-129.

<sup>5.</sup> Ibid.

<sup>6.</sup> John R. Benedict, "The Unraveling and Revitalization of U.S. Navy Antisubmarine Warfare," *Naval War College Review* 58 no. 2 (Spring 2005): 100.

<sup>7.</sup> John R. Benedict Jr., "Third World Submarine Developments," *The Submarine Review*, October 1990, 53-54.

<sup>8.</sup> U.S. Department of Defense, *Directions for Defense, report of the Commission on Roles and Missions of the Armed Forces* (Washington, DC: U.S. Government Printing Office, 1995), 2-20.

<sup>9.</sup> Benedict, "The Unraveling and Revitalization of U.S. Navy Antisubmarine Warfare," 95.

<sup>10.</sup> Andrew Koch, "US Navy in bid to overhaul undersea combat," *Jane's Defense Weekly* 42, no. 10 (9 March 2005): 11.

better coordination of the assets available. Today, accordingly, there is a reinvigorated focus on ASW technology, training, and tactics.<sup>11</sup>

However, a wide gap still remains between our employment of ASW at the tactical, engagement/battle level, and our employment of ASW at the operational, campaign/theater, level. This seam could be exploited by our enemies to threaten our sea lines of communication and restrict our ability to quickly project power in forward areas as our doctrine and strategy call for. The employment and coordination of theater ASW assets, both U.S. and regional allies', is inconsistent due to a lack of operational doctrine. Consideration of operational art offers an opportunity to mitigate submarine warfare risks by bridging the gap between ASW tactics and national/regional strategy.

A persistent anti-submarine warfare command with operational control of theater assets and regional expertise, as well as functional expertise, can fill this seam. Such a command would best exploit operational factors to counter threats and maintain the initiative. This paper looks at a successful historical example from the Mediterranean and a current effort in the Pacific. It then makes several recommendations for implementing just such a command.

## Reinvigorated Focus: Tactics, Technology and Operational Art

It is a given that Navy culture focuses on air, surface, and submarine warfare communities. There are no cultural norms in place to foster team ASW nor are there incentives to promote it. As a result, we tend to focus on platform driven tactics, techniques and procedures (TTPs). It is also a given that ASW tools are highly specialized and scientific in nature based on the complexity and variability of the medium they are required to operate

<sup>11.</sup> Benedict, "The Unraveling and Revitalization of U.S. Navy Antisubmarine Warfare," 115.

in. As a result, the tendency is to search for the next technological "silver bullet" to solve the physics of ASW.

In April 2004, the creation of Fleet ASW Command (FLTASWCOM) was heralded as an exemplar of the renewed Navy focus on ASW.<sup>12</sup> FLTASWCOM was the ASW center of excellence; its mission addressed five areas:

- Foster high performance of fleet operations on all ASW platforms through quality, integrated and Fleet ASW training;
- Assess ASW performance at theater, carrier/expeditionary strike group, and unit level ship, aviation squadron, and submarine levels against standardized, common metrics:
- Improve Navy individual student ASW training and qualification;
- Promote rapid delivery of selected new ASW technologies and training through aggressive support for the Sea Shield, Sea Trial, and Sea Warrior processes;
- Improve Theater Undersea Warfare capability. <sup>13</sup>

Two of the 5 mission statements support Theater ASW.<sup>14</sup> On 1 October 2006, the Navy disestablished Commander, Mine Warfare Command (COMMINEWARCOM) and merged it with FLTASWCOM to create the Naval Mine and Anti-Submarine Warfare Command (NMAWC).<sup>15</sup> The new command is now the center of excellence for both MIW and ASW. NMAWC's mission addresses six areas:

- Develops doctrine, tactics, techniques, and procedures as the MIW and ASW Center of Excellence;
- Focuses efforts across the MIW and ASW mission areas to include resource sponsors, Systems Commands, Laboratories, and experimentation initiatives; Articulates MIW and ASW operational and future readiness capabilities requirements; Promotes rapid delivery of new technologies and training, through support of Sea Shield and Sea Trial;

<sup>12.</sup> Pacific Fleet Public Affairs, "Navy to stand up Fleet Anti-submarine Warfare Command," Navy Newsstand, 17 March 2004, http://www.news.navy.mil (accessed 23 September 2006).

<sup>13.</sup> Fleet Anti-Submarine Warfare Command, "Fleet Anti-Submarine Warfare Command," FLTASWCOM, http://www.fltaswcom.navy.mil/index.htm (accessed 23 September 2006).

<sup>14.</sup> Bullet 2 subcomponent is ASW performance at theater ... levels and Bullet 5 Undersea Warfare traditionally includes both mine and submarine warfare.

<sup>15.</sup> Naval Mine and Anti-Submarine Warfare Command, "Naval Mine And Anti-Submarine Warfare Command," NMAWC, 16 October 2006, http://www.fltaswcom.navy.mil/nmawc/AboutNMAWC.htm (accessed 17 October 2006).

- Promotes MIW and ASW training and qualification improvement; Supports the numbered Fleet Commanders in MIW and ASW integrated training and certification;
- Supports MIW and ASW performance assessment at all levels against standardized, common metrics;
- Supports Theater ASW:
- Supports Operational Commanders with: a standing deployable MIW Battle Staff; deployable mine countermeasures staffs; Combatant Commanders' MIW operational and contingency plan development; and maritime component commander and theater ASW staff support. The MIW Battle Staff, as the Naval Component Commander MIW Commander, executes delegated Operational Control of Air, Surface, and Underwater MCM forces.

Theater ASW support is now explicitly stated in one of the six mission bullets. It remains to be seen whether one command can be an effective center of excellence for two missions and has the capacity to avoid diluting its focus. However, the fact remains that at least some theater level ASW operational "thinking" is taking place.<sup>16</sup>

Consider the creation of Task Force ASW in 2002 and its publication of the "Anti-Submarine Warfare Concept of Operations for the 21<sup>st</sup> Century" in December 2004.<sup>17</sup> These events were also heralded as emblematic of the Navy's renewed emphasis on ASW.<sup>18</sup> The ASW CONOPS' near-term transformational goal is to leverage "advances in acoustic processing, data collection and sharing, communications, collaborative real-time planning, reachback support, rapid maneuver, and precision engagement." Its long-term transformational goal is to "build on these advances to fully leverage an integrated network of sensors coupled to stand-off weapons." It then posits that "our long term transformation

<sup>16.</sup> Operational thinking equates to knowledge and understanding of the interrelationships between policy, strategy, operational art, and tactics. Milan Vego, "Operational Thinking," (research paper, Newport, RI: U.S. Naval War College, Joint Military Operations Department, June 2006), 2.

<sup>17.</sup> Richard R. Burgess, "Awfully Slow Warfare," Sea Power 48, no. 4 (April 2005): 12-14.

<sup>18.</sup> Ibid.

<sup>19.</sup> U.S. Navy, Task Force ASW, "Anti-Submarine Warfare: Concept of Operations for the 21<sup>st</sup> Century," (Washington, DC: Department of the Navy TF ASW, December 2005), 1, http://www.chinfo.navy.mil/navpalib/policy/asw/asw-conops.pdf (accessed 22 August 2006).

strategy will exploit (these) tactical advances to achieve two key operational level objectives..." These objectives are identified as "hold enemy forces at risk" and "secure friendly maneuver area" which can be translated as ability to take the initiative and force protection, respectively. Initiative/offense is certainly a principle of war at all levels and force protection is an element of operational level warfare. But the implication that these objectives can be achieved through technology applied at the tactical level falls short of full operational level theater considerations.

Granted, this CONOPS is intended as the guiding document for the ASW Master Plan; that is, the acquisition strategy for ASW technology. Where then is the guidance for employing operational level ASW? The CONOPS is driving the plan to focus the acquisition community in developing and fielding technology. NMAWC is developing the tactics and training for employing that technology. These are the enablers. Where is the ASW operational "vision" that will tie tactical successes together into theater success that leads to achieving strategic objectives and the desired end state? It is clear that operational thinking is occurring. The CONOPS contains references to new technology for "battlespace preparation and monitoring, Joint Force ASW, force protection, and command and control." All are operational functions. Its image of network centric operations challenges us to move away from traditional weapon and platform centric development. It could even be considered operational "thinking." However, the focus is technology. Revolutionary high-tech netted systems of systems dependent on the development of autonomous sensors and unmanned platforms lead us away from non-materiel approaches, in this case the

<sup>20.</sup> Ibid., 2.

<sup>21.</sup> Operational "vision" is the practical application of operational thinking in planning, preparing, and executing a campaign or major operation. Milan Vego, "Operational Vision" (research paper, Newport, RI: U.S. Naval War College, Joint Military Operations Department, June 2006), 1.

<sup>22.</sup> U.S. Navy, Task Force ASW, "Anti-Submarine Warfare: Concept of Operations for the 21st Century," 5.

employment operational art in theater. Operational practitioners are still needed to properly apply ASW at the theater level.

Tactics and training are in place. Technology guidance is in place. NMAWC's mission implies operational thinking will go into tactics development and training. It is apparent that Task Force ASW included operational thinking in the CONOPS. However, operational thinking and vision must still be applied to specific theaters. An operational level bridge is required to aggregate tactical successes into theater-level success. That bridge is the Theater ASW Command.

# The Theater ASW Commander Concept

The Naval Warfare Development Command (NWDC) defined the Theater ASW Commander (TASWC) as "the local and persistent authority and regional expert in ASW."<sup>23</sup> The TASWC is a standing organization responsible for ASW command and control (C2) in a theater area of responsibility (AOR). The TASWC has operational control (OPCON) of all theater ASW assets: submarine, surface, and air, as well as information systems.<sup>24</sup>

NWDC envisions TASWC operations in the following manner. During both prekinetic and kinetic operations, the theater wide focus enables the TASWC to prepare the water space for the arrival of strike/task groups. Prior to their arrival, the TASWC pre-plans ASW operations and pre-searches the operating area. Upon maneuver into the TASWC AOR, the task group ASW commander will take control of the local area from the TASWC while the TASWC retains OPCON for the remainder of its AOR. The TASWC then monitors local execution of the plan, as well as any changes, through reports back from the

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<sup>23.</sup> Naval Warfare Development Command, "Fleet battle Experiment KILO" (analysis report, Newport, RI: Naval Warfare Development Command 23 September 2003), 3, https://www.nwdc.smil.mil/mbc (accessed 8 September 2006). For Official Use Only

<sup>24.</sup> Ibid.

task group. In addition, it provides a reach-back capability for the task group ASW commander to call upon as required. Upon transit out of the area, responsibility returns to the TASWC and the new area transitions to local OPCON.<sup>25</sup>

Further exploration of this definition, operational art, theater-level warfare, and joint doctrine leads to additional TASWC attributes, capabilities, and responsibilities. The TASWC is responsible for all ASW activities in his AOR throughout all the levels of war ensuring full spectrum ASW dominance. During pre-kinetic operations, the TASWC acts as the focal point for ASW planning in support of theater contingency plans (CONPLANS). It can also support the actual operation plan. As part of Phase 0, the TASWC can help shape the operational maritime environment in favor of the U.S., friendly governments, and potential coalitions. It accomplishes this through solidifying relationships with regional counterparts and developing allied and friendly ASW related "capabilities for self-defense and coalition operations, improving information exchange and intelligence sharing, and providing U.S. forces with peacetime and contingency access." <sup>26</sup>

As part of Phase I efforts, the TASWC can help deter potential adversaries by taking all the ASW related actions in preparation for the kinetic phases of the plan. It is already operating in theater as a forward deployed force. It can act as the Combatant Command's ASW subject matter expert to friendly navies. It can develop requirements for special permissions to access territorial airspace and waters for platforms and deployable sensors.

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<sup>25.</sup> Naval Warfare Development Command, "Fleet Battle Experiment-KILO (FBE-K) Sea Shield: ASW" (analysis report, Newport, RI: Naval Warfare Development Command 27 March 2003), 2, https://www.nwdc.smil.mil/mbc (accessed 8 September 2006).

<sup>26.</sup> Chairman, U.S. Joint Chiefs of Staff. Joint Operations. Joint Publication (JP) 3-0 (Washington, DC: CJCS, X Month 2006), IV-27.

In these pre-kinetic phases the TASWC is vital in creating the regional component of the "1,000 Ship Navy Global Maritime Network." Coalition partners bring expertise in diesel submarine operations in the littoral. They are most likely close to and may even control maritime chokepoints that are identified as decisive points in contingency plans. All are key elements in the preparation and evaluation of friendly and enemy courses of action.

In addition, the TASWC can work in conjunction with the Combatant Command's Joint Intelligence Center (JIC). It can maintain an up-to-date operational picture in support of the ASW contribution to the Joint Intelligence Preparation of the Operational Environment (JIPOE) or Battlespace (JIPB) as it was previously known. It can provide specialized expertise for the development of theater submarine warfare related Commander's Critical Information Requirements, Priority Intelligence Requests, and Named Areas of Interest in support of preliminary intelligence, surveillance and reconnaissance collection plans. Finally, if the need for Crisis Action Planning (CAP) should arise, the TASWC is ready to go with current knowledge of and assets in the battlespace.

Supporting and supported relationships can be further defined between the TASWC, a

Joint Task Force Commander and its Joint Force Maritime Component Commander

(JFMCC) via plans and warning orders.

# "When Old is New Again" <sup>28</sup>

The general concept of a Theater ASW Commander (TASWC) is not a new one. In 1976, the Sixth Fleet Commander created Task Force 66 (CTF 66) to support the incoming

<sup>27.</sup> John G. Morgan, Jr. and Charles W. Martoglio. "The 1,000 Ship Navy Global Maritime Network," *U.S. Naval Institute Proceedings* 131, no. 11 (14 June 2005): 14-17.

<sup>28.</sup> James E. Hooper Captain USNR (ret.) (President, Sakonnet Technologies) in discussion with the author, 15 September 2006. During a visit with Jim I happened to mention I was researching the topic of this paper. After inviting me to sit down and handing me a pen and pad he said; "I have a name for your paper."

ASW surface ship squadron deploying with new developmental towed-array sonar.<sup>29</sup> The Chief of Naval Operations wanted the surface group to stay together focused on evaluating the new technology and not be co-opted for escort duty as had been with the previous squadron. CTF 66 established a coordinated land based patrol aircraft, submarine and surface ship theater ASW force. Sonarmen from the air and submarine forces trained their surface counterparts. According to COMSIXTH FLEET:

The ultimate success story of the ASW squadron was when a Soviet Echo II-class nuclear submarine was picked up by an Atlantic Command submarine outside the Med, trailed through the Strait of Gibraltar without losing contact, and passed to the ASW squadron. Once in the Med, contact was alternately maintained by submarines, P-3s, and the ASW squadron. Contact was passed from the submarine to the P-3s to the ASW squadron and back to the P-3s. If the ASW squadron lost it, they would tell the P-3s and the submarines, and the submarine that was in trail would get the ASW squadron back on contact. They tracked them for ten days. The ultimate act was on 28 August 1976, when the skipper of the Echo II got mad and ran into the side of the USS *Voge*. <sup>30</sup>

Unfortunately, after the surface ship squadron completed its deployment and success of the new towed-array declared, the theater focus was lost, coordination skills were allowed to atrophy, and assets were once again detoured to escort duty.

In the early 1980s the Cold War was back in the headlines. President Ronald Reagan anointed the "evil empire" in his historic speech to the House of Commons on June 8, 1982.<sup>31</sup> The SSN was in ascendancy and ASW was the recognized freedom of the seas enabler. To address the threat in the Mediterranean, a Coordinated Area ASW Commander,

30. Ibid

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<sup>29.</sup> Harry DePue Train, II, Admiral USN (retired) interview by Paul Stillwell, July 1986 to October 1996, transcript excerpt, 24, U.S. Naval Institute Oral History, Annapolis, MD. http://www.usni.org/oralhistory/T/train.htm (accessed 15 September 2006).

<sup>31.</sup> Paul Halsall, comp., *The Internet Modern History Sourcebook* (New York, NY: Fordham University, 2001), http://www.fordham.edu/halsall/mod/1982reagan1.html (accessed 15 September 2006).

COMASWSIXTHFLEET was established.<sup>32</sup> In this role, CTF66 not only coordinated air,

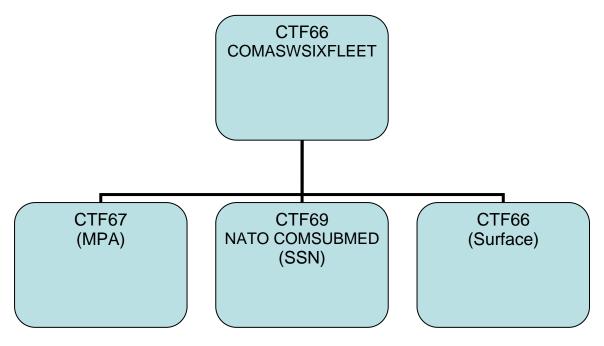


Figure 1. Coordinated Area ASW – 6<sup>th</sup> Fleet AOR circa 1980-82.

surface, and sub-surface ASW assets, but also alliance assets as NATO Commander Submarine Forces Mediterranean, COMSUBMED. Staff included expertise in intelligence and local geography as well as senior post command tour experts in air, surface and submarine ASW. Every submarine entering through the Straits of Gibraltar became a CTF66 responsibility. CTF66 became so proficient that it could determine, *a priori*, the path a submarine would take through the straits based on the hand-off of contact information from the Atlantic Command.

The impact on ASW competency was dramatic. Prior to the establishment of COMASWSIXTHFLEET, towed array contact time was roughly 70 hours per annum. By the end of the first year, that number increased by an order of magnitude. It doubled again by the end of the second. Prior to establishment, ASW surface craft supporting on station carrier battle groups were available for ASW operations only during and while transiting.

<sup>32.</sup> Hooper, discussion. CTF66 details were provided during the discussion.

This meant assets were available neither when nor where they were needed. After the standup, assets were assigned for 45-day rotations under COMASWSIXTHFLEET OPCON. This period also saw the first contact hand-off between a U.K. SSN and a U.S. SSN.

## **Initiative in the Pacific**

Recognizing the ASW threat in 2000, Commander, Pacific Fleet desired a sustained local ASW expertise to "mitigate the risk if a rapid build-up to hostilities should be required."<sup>33</sup> In response Commander, Seventh Fleet designated Task Force 74 (CTF-74) Theater ASW Commander (TASWC) for the SEVENTHFLT AOR. As TASWC, CTF-74 transitioned from a forward deployed squadron with responsibility for submarine readiness to responsibility for "ASW command and control in all of SEVENTHFLT's AOR not patrolled by a Carrier Strike Group or an Expeditionary Strike Group."<sup>34</sup>

In 2003, the Naval Warfare Development Command experimented with the TASWC concept as a small part of Fleet Battle Experiment KILO (FBE-K). In this role, CTF-74 commanded a significant force of simulated submarine, surface and land–based air ASW assets. Its role was to offensively prepare the battlespace prior to the arrival of the CSG and ESG. In addition, the ability to hand off forces (transitional C2), water space management, and contacts of interest from TASWC to local ASW Commanders with the surface groups and back again was explored.<sup>35</sup> The principal finding and recommendation was summarized as follows:

TASWC requires a staff trained across a wide range of warfare disciplines and knowledgeable in joint military operations, as well as operational-level warfare

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<sup>33.</sup> David W. Cann. "Analysis Report for Fleet Battle Experiment KILO ASW Initiatives" (analysis report, Newport, RI: Naval Undersea Warfare Center 26 August 2006), 6.

<sup>34.</sup> Ibid.

<sup>35.</sup> Naval Warfare Development Command, "Fleet Battle Experiment-KILO (FBE-K) Sea Shield: ASW" (analysis report, Newport, RI: Naval Warfare Development Command 27 March 2003), 2, https://www.nwdc.smil.mil/mbc (accessed 8 September 2006).

planning procedures and products. TASWC, as the local and persistent authority and regional expert in ASW, should publish theater-wide guidance documents and a CONOPS to help Carrier Strike Group (CSG) and Expeditionary Strike Group (ESG) commanders rapidly and smoothly establish an effective working relationship. Further TASWC experimentation is needed and recommended...<sup>36</sup>

Follow-on analyses, war games, and FBEs, as well as other Pacific exercises including Thundering Dolphin, further exercised portions of the concept.<sup>37</sup> However, it is not clear from open sources whether progress is being made and whether the focus remains at the operational level.

# **Technology and Tactics Alone Do Not Suffice**

Technology and tactics are necessary, but not sufficient to solve the problems presented by submarine warfare. From an analysis of the Falklands campaign John Benedict posed five controlling factors impeding ASW operations against submarines. They are no less valid today.

First, diesel submarines are inherently quiet when operating on batteries and represent difficult detection opportunities for passive sonars. Second, adverse (often unfamiliar) acoustic environments are all too common in Third World operational settings. Third, less operational and technical intelligence data may be available on the adversary than for the Soviets, particularly if the adversarial relationship is unexpected. Fourth, it is often a rapidly developing "come as you are" conflict and potentially involves long supply lines. Fifth, early catastrophic losses (e.g., sinking of the *Belgrano*) can be an effective deterrent to the forces affected and will undermine the popular support for the conflict.<sup>38</sup>

That diesel submarines are quite is a truism. The diesel submarine in shallow water is a hard problem. This problem is a key driver for new technology. It argues for better passive sonars, active sonars, and non-acoustic sensor development. However, technology and

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<sup>36.</sup> Naval Warfare Development Command, "Fleet Battle Experiment-KILO Analysis Report" (analysis report, Newport, RI: Naval Warfare Development Command 23 September 2003), 3, https://www.nwdc.smil.mil/mbc (accessed 8 September 2006).

<sup>37.</sup> David W. Cann, (analyst Naval Undersea Warfare Center Division Newport) in discussion with the author 15 September 2006.

<sup>38.</sup> John R. Benedict Jr., "Third World Submarine Developments," The Submarine Review, October 1990, 54.

tactics must not be emphasized to the exclusion of all else. Technology and tactics alone fall short in addressing the remaining requirements for successful ASW operations.

Oceanographic information and intelligence information is required. Without this information, correct tactics cannot be employed. It took the British only a few weeks to realize their information shortfall. The fact that the *San Luis* completed a six week deployment against the Royal Navy and was ready to redeploy at campaign end proved they never recovered from it. Indeed, the British never knew that of the four Argentine

submarines, only two were operational at the start of the campaign.<sup>41</sup>

The TASWC addresses this shortfall by focusing theater oceanographic collection efforts well in advance of any conflict. Further, it acts as a clearinghouse for theater intelligence on friendly and potentially hostile forces. The TASWC mitigates force shortfalls and long logistics tails by bringing regional components of the "1,000 Ship Global Maritime Network" to bear. Available U.S. forces are supplemented through pre-existing cooperative relationships. Forces are interoperable through previously conducted TASWC exercises. Finally, increased resources and theater expertise reduce the likelihood of catastrophic losses.

Current transformation doctrine calls for the rapid deployment of fewer, smaller, and lighter forces. Unfortunately, submarine warfare will confound those plans by imposing factor time, factor space, and/or factor force concessions. U.S. forces cannot afford the losses of attrition based warfare as conducted in World War II. The Royal Navy was successful in the Falkland's in spite of their ASW efforts, not because of them. A credible

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<sup>39.</sup> John R. Benedict Jr., "The Unraveling and Revitalization of U.S. Navy Antisubmarine Warfare," 96.

<sup>40.</sup> Robert L. Scheina, "Where Were Those Argentine Subs," U.S. Naval Institute Proceedings, 110/3/973 (March 1984): 120.

<sup>41.</sup> Ibid., 115.

and capable Royal Navy submarine force sank the *General Belgrano*. A limited Argentine submarine threat hampered South Georgia invasion plans and triggered massive Royal Navy ASW operations. Worse yet, all those efforts failed to prevent the *San Luis* from making two torpedo attacks on surface ships and possibly a third on a submarine.<sup>42</sup> In fact, the attacks were unsuccessful, not because of British ASW operations, but because the Argentine torpedoes failed.<sup>43</sup> Imagine the devastation a credible and capable Argentine submarine threat would have caused. One day a proficient adversary will again operate a submarine force making the hope of Falklands-like success both risky and ill advised.

Finally, rapid deployment does not afford the time to relearn the lesson in crisis.

Therefore, the U.S. must be proactive, not reactive, in preparing for the submarine warfare threat. "History of past wars has shown that neither superior technology nor superior tactics can, by themselves, ensure victory in the field." The TAWSC ensures that this lesson is not lost.

## **Unity of Command or Unity of Effort**

Ownership of resources means they are available when you need them. Reliance on others for resources puts availability at risk. Unity of command, therefore, is the classically preferred solution. "Go for unity of command first, unity of effort second," is conventional wisdom.

Command and control of theater assets may be just too hard to achieve. The reasons are several. First, ASW resources are scarce. There are fewer platforms available today and the autonomous sensors called for in the CONOPS are still years in the future. Second, there are many competing tasks for these assets. Escort duties, the war on terrorism and national

<sup>42.</sup> Robert L. Scheina, "Where Were Those Argentine Subs," 118-120.

<sup>43.</sup> Ibid

<sup>44.</sup> Milan Vego, Operational Warfare, 12.

tasking are just a few. Finally, assets may have been transferred out of theater to support contingencies such as the war in Iraq. In point of fact, theater assets may not exist.

One approach removes OPCON from the TASWC altogether. In this case the Theater ASW Command essentially becomes the Theater ASW Coordinator. In this role it becomes a planning cell for theater level ASW operations and a clearing house for theater ASW information. Plans would be passed to transiting strike groups for their implementation. At completion, modifications and data would be returned to the TASWC to update plans, databases, and libraries. It could perform the functions identified in the concept short of C2. However, this approach would deny the TAWSC the key operational function necessary to "to quickly grasp the essential elements of the situation in a relatively large part of the theater, make a decision, and then energetically strive to achieve strategic or operational objectives by using all available sources of power."

A far better solution is to take advantage of the CTF 66 example from the early 1980s. In this case, task units to the TASWC for short rotations either at the beginning or end of deployments. For this period, 45 days in the aforementioned example, the asset is dedicated to theater ASW under TASWC OPCON.

#### Recommendations

Shared vision engendered by clear leadership is required. To fully benefit from a Theater ASW Command, the Navy needs to institutionalize the concept. A prime opportunity presents itself with the Chief of Naval Operations' call for a New Maritime Strategy. <sup>46</sup> Include the TASWC as an integral part of that strategy. Develop and publish

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<sup>45.</sup> Milan Vego, "Operational Vision," 6.

<sup>46.</sup> Adm Mike Mullen, Chief of Naval Operations (remarks to the Current Strategy Forum, Naval War College, Newport, RI, 14 June 2006).

doctrine based on experimentation with CTF 74 and the past experience of CTF 66, as well as others that may have anecdotal information to contribute.

Regional Combatant Commanders should establish TASWCs where they are required. The requirement is determined by existing CONPLANS. When a CONPLAN specifically identifies submarine warfare in the enemy's most likely course of action and/or most dangerous course of action, establish a TASWC in that theater. Also, if the CONPLAN lists maintenance of sea lines of communication as a critical requirement for friendly courses of action, establish a TASWC. Further, if the CONPLAN identifies submarine warfare as an enemy critical factor or ASW as a friendly critical factor, a TASWC should be established.

Use the model of CTF 74 and CTF 66. Take advantage of the existing infrastructure of a forward deployed command but change its focus. Staff the TASWC with senior post-command tour experts in air, surface, and submarine ASW. Give the TASWC operational command and control of theater ASW assets and information systems. Train staff in the operational art and joint doctrine. Include them as subject matter experts during Phase 0 and Phase I shaping and deterrence efforts.

Further, formally link the TASWC with the Regional Combatant Command's Joint Intelligence Center. TASWC will then be able to maintain an up-to-date operational picture in support of an ASW contribution to the JIPOE. In addition, it will be able to support crisis action planning with up-to-date information. Finally, link the TASWC with coalition partners through Phase 0 shaping and Phase 1 deterrence efforts.

There is no doubt that institutional risk is associated with new concepts. The Theater ASW Commander is no exception. Limit that risk by building on the past success of CTF-66. It worked for three main reasons. First, there was commitment from the top. This

commitment dedicated ASW assets to operational control of the theater commander. The TASWC uses those assets to shape the theater, perform oceanographic surveys, or perform any other tasking necessary to fill the seams. As in the CTF-66 model, the TASWC can evaluate new technologies resulting from the Task Force ASW CONOPs. Feedback provides senior decision makers with information on how best to apply acquisition resources. Second, assets were scarce then as now. Use the same 45-day rotational model to transfer OPCON between task groups and the TASWC. Under this model the TAWSC becomes a viable operational command. Staff positions will attract senior post-command tour officers with the expertise necessary to function as a theater level staff. Third, forces under OPCON to the TASWC dedicate time to true team ASW. The end result is technical competence, effective operational concepts, and finely honed planning skills. That is the Theater ASW Commander.

## **Conclusions**

We tend to ignore the lessons history teaches. "Past experience, if not forgotten, is a guide to the future." By its very nature, operational art takes into consideration lessons of military history. Employing operational art is not a guarantee of future military success. It is, however, ignored at great peril. "An exclusive focus on technology and tactics is likely to result in time-consuming and costly attritional warfare against a strong and resilient opponent. It would make one's forces vulnerable to an opponent who, while technologically inferior, thinks better and faster and uses his smaller force more creatively, perhaps

<sup>47.</sup> Chinese Proverb, *The Columbia World of Quotations*. (New York, NY: Columbia University Press, 1996). http://www.bartleby.com/66/. (accessed 23 September 2006).

asymmetrically."<sup>48</sup> Operational art employed by the Theater ASW Commander is vital to successful transformation.

Should every theater have its own standing ASW command? No. But when one is created, use a model institutionalized in doctrine. History is replete with examples of learning and re-learning the devastating effect of submarine warfare. Do not wait for a crisis to illuminate a need. Take the proactive approach and fully exploit operational art.

"Tactical employment of one's forces cannot be successful without a clear and unmistakable focus on operational warfare, that is, on the theater-wide employment of combat forces and logistics." <sup>49</sup> A theater ASW command staff dedicated to team ASW, well versed in Joint Operations, that employs operational art, can mitigate the risks posed by the submarine warfare threat to maritime assured access.

<sup>48.</sup> Milan Vego, Operational Warfare, 12.

<sup>49.</sup> Ibid, 4.

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